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# Notes on the genus *Hagianga* Mollet, 2020 (Lepidoptera, Zygaenidae, Procridinae)

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**Abstract:** The genus *Hagianga* Mollet, 2020 is recorded from China for the first time with the first discovery of the male. The adults and genitalia of the genus are illustrated.

**Keywords:** burnet moth, Oriental Realm, taxonomy

# 关于河江斑蛾属的注释（鳞翅目，斑蛾科，小斑蛾亚科）

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**摘要：**河江斑蛾属 *Hagianga* Mollet, 2020 在中国被首次记录，其雄性亦被首次记载。本文图示了该属之成虫与两性生殖器。

**关键词：**斑蛾，东洋区，分类学

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## Introduction

The genus *Hagianga* Mollet, 2020 (type species *H. tieni* Mollet, 2020, by original designation) is a monotypic procridinid genus originally known from North Vietnam (Mollet 2020). It is characterised by the absence of a praebursa in the female genitalia, while in the superficially similar genera, e.g. *Chrysartona* Swinhoe, 1892 and *Bremeria* Alpheraky, 1892, the praebursa is always present (Mollet 2020). In addition, the elongated and membranous ductus bursae is also characteristic for *Hagianga*. The type species was described based on a single female holotype, and no additional specimens have been recorded since the original description. During the course of studying the procridinid material deposited in different institutes, a male from Hunan and a female from Taiwan of this species were discovered, representing the first record of *Hagianga* from China. Meanwhile, the previously unknown male is also described and illustrated herein.

## Material and methods

Specimens examined are deposited in the following institutional and private collections: South China Agricultural University (SCAU), Guangzhou, China; Kyushu University (CKU), Fukuoka, Japan and the research collection of Bernard Mollet (CBM), Gif-sur-Yvette, France. Photos of imagoes were taken by a Sony DSC-RX100 v1.00 camera or a Panasonic DC-G91. Abdomens were removed and macerated in hot 10% NaOH or KOH solution for examination of male and female genitalia. Photos of genitalia were taken under a Keyence VHX-5000 or a VHX-2000 digital microscope. Adult and genitalia photos were all processed by Adobe Photoshop CS5 ® software.

**Abbreviations.**

| | |
|---|---|
| HT | Holotype (used in the legends to the illustrations) |
| BOLD | Barcoding Of Life Data |
| PCCMO | Procridinae Chalcosiinae Callizygaeninae Moths |

**Label data.** For the holotype label citations, information provided in quotation marks is transcribed verbatim. Different labels are separated by a forward slash ("/") while the different lines of the same label are separated by a vertical bar ("|"). Any additional data are provided in square brackets.

## Results

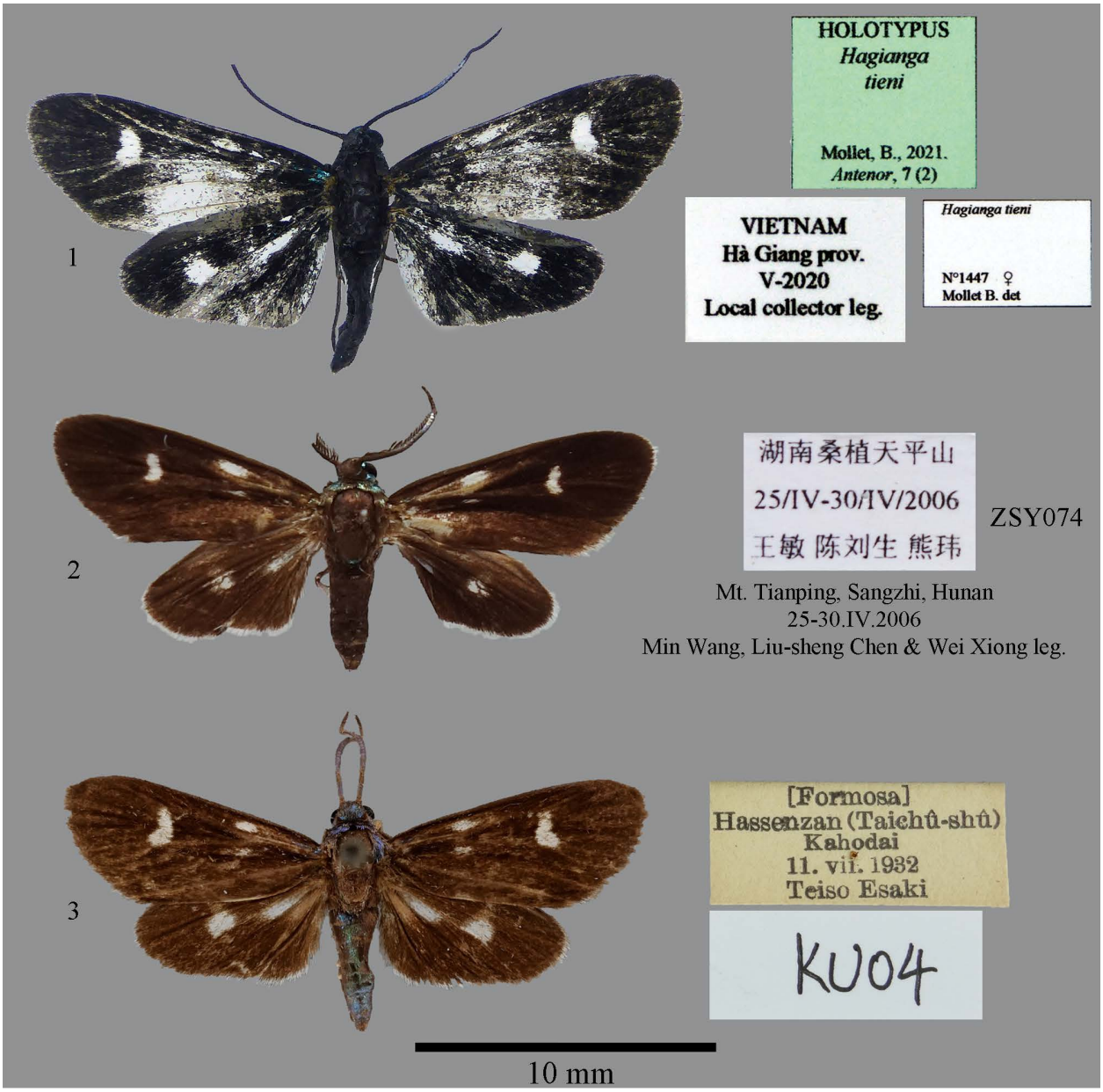
### *Hagianga tieni* Mollet, 2020 河江斑蛾

Figs 1–7

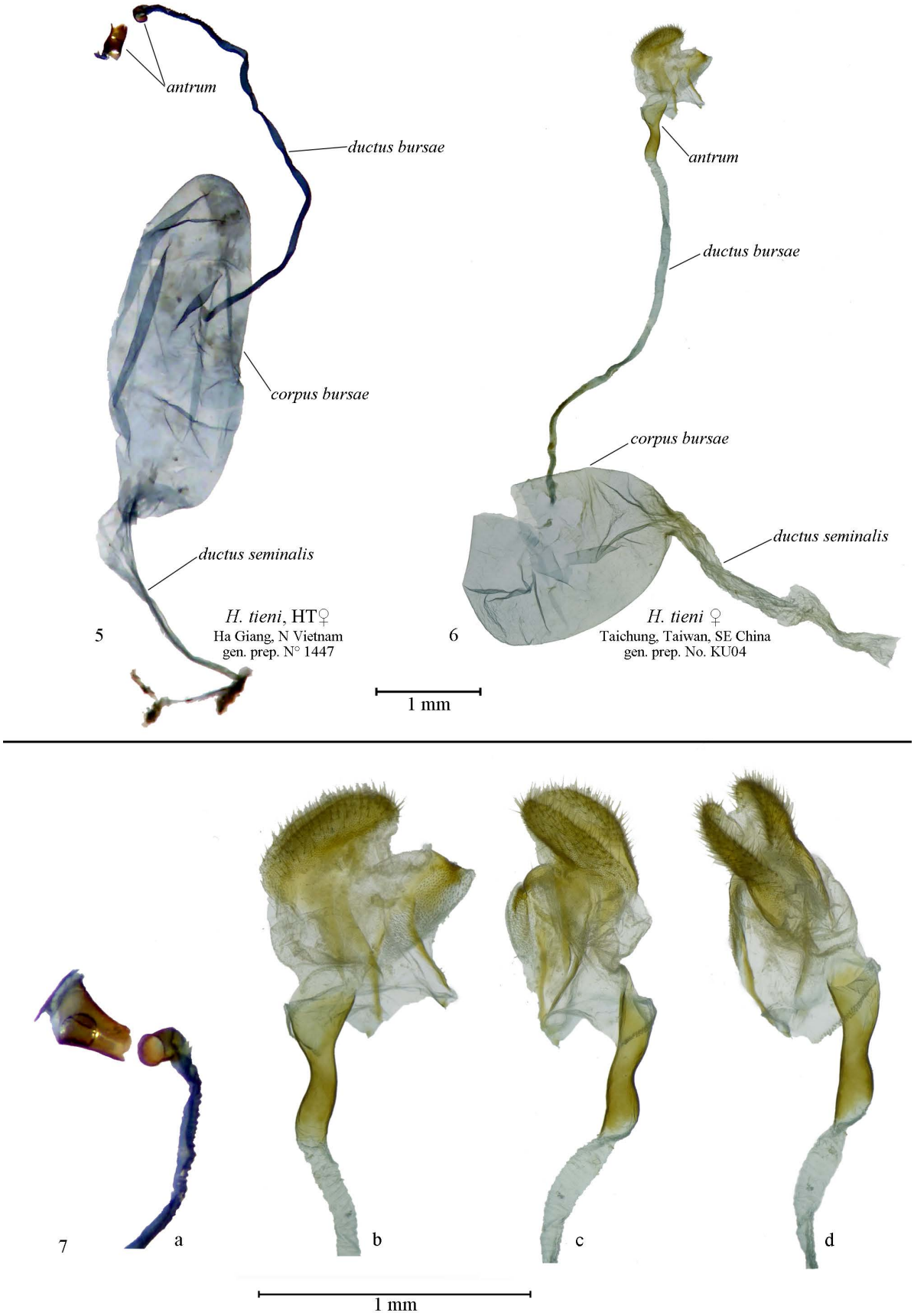
*Hagianga tieni* Mollet, 2020: 107, figs 1–4; Efetov & Tarmann, 2025: 432.

**Material examined. Holotype:** (Figs): female, "VIETNAM | Hà Giang Prov. | V-2020 | Local collector leg." / "HOLOTYPUS | *Hagianga* | *tieni* | Mollet, B., 2021. | *Antenor*, 7(2)" / "*Hagianga tieni* N°1447 ♀ | Mollet B. det. " (CBM). 1 male, Mt. Tianping, Sangzhi, Hunan, 25–30. IV. 2006, Min Wang, Liu-sheng Chen & Wei Xiong leg. (SCAU); 1 female, 11. VII. 1932, Formosa, Hassenzan (Taichu-shu), Kahodai [Taiwan, Pahsienshan (Taichung), Chiapaotai], Teiso Esaki leg., gen. prep. No. KU04 (CKU).

**Description of the male.** Length of forewing 9.2 mm. Antennae bipectinate, with distal one fourth without rami. Head, thorax and abdomen brown, covered with metallic bluish green scales. Patagia covered with metallic bluish green scales. Tegulae brownish and suffused with metallic bluish green scales. Forewing ground color blackish brown with three white patches: an oval one situated in costal area; a dash-like one situated in discal cell and a kidney-shaped one situated at the distal end of discal cell. Cilia white at apex and tornus and blackish brown between these two areas. Hindwing ground color as forewing, with two white patches: a subbasal one situated below the discal cell and a rounded one situated at the distal end of discal cell. Cilia white thoroughly. **Male genitalia:** Uncus bow-shaped in lateral view, bulged basally, strongly curved downwards medially and pointed apically. Tegumen nearly rectangular, with two distally



**FIGURES 1–4.** Adults and male genitalia of *Hagianga tieni*. **1–3** adults **4** male genitalia. Depositories of the specimens: 1 in CBM, 2 & 4 in SCAU, 3 in CKU.




**FIGURES 5–7.** Female genitalia of *Hagianga tieni*: **5 & 6** whole female genitalia **7** magnified area, showing antrum. **a** = holotype female, **b** = KU04, right lateral view; **c** = KU04, left lateral view; **d** = KU04, ventral view. Depositories of the specimens: 5 in CBM, 6 in CKU.

rounded anterior processes. Vinculum slender. Juxta shield-like. Saccus ill-developed, horseshoe-shaped. Valvae trapezoid with a semioval basal process; costa sclerotized, gradually narrowed towards its distal end; sacculus sclerotized, bulged subbasally and upcurved medially, with the remaining section nearly even in width. Phallus slender, with a well-developed coecum. Vesica nearly the same width as phallus, covered with granulations thoroughly.

**Remarks. 1)** The male genitalia of *Hagianga* can be distinguished from those of *Chrysartona* and *Bremeria* in the much thicker uncus and the slender phallus without cornutus, while in the latter two genera the phallus is much shorter, stouter and bears large cornuti. **2)** The Taiwanese female differs from the holotype female in the narrower anterior section of the kidney-shaped discalcellular patch on forewing and the smaller and more rounded corpus bursae in female genitalia. The antrum of the Taiwanese female also seems somewhat longer than that in the holotype. However, since the antrum in the holotype was broken, the direct comparison of the two individuals in this structure could have inaccurate result. It is possible that the Taiwanese population represents a different subspecies or even a different species, pending future studies, but such assumption can only be confirmed after new female is available. **3)** The COI barcoding data of the female holotype is accessible on the BOLDSYSTEMS website (PCCMO project, BOLD:AE10807), and a comparison between it and Taiwanese or continental Chinese populations on the same gene region could provide new insights into the taxonomy of the genus.

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## References

Alphéraky S 1892: Lépidoptéres rapportés de la Chine et de la Mongolie par G. N. Potanine. *Mémoires sur les lépidoptères*, 6: 1–81, pls. 1–3.

Efetov KA & Tarmann GM 2024: An annotated catalogue of the Procridinae of the World (Lepidoptera: Zygaenidae). *SHILAP Revista de lepidopterología*, 52 (207): 409–547. https://doi.org/10.57065/shilap.956

Mollet B 2020: A new genus and a new species of Artonini from Northern Vietnam (Lepidoptera Zygaenidae Procridinae). *Antenor*, 7 (2): 106–108.

Swinhoe C 1892: *Catalogue of Eastern and Australian Lepidoptera Heterocera in the Collection of the Oxford University Museum (Part 1)*. Clarendon Press, Oxford, 324 pp, 8 pls.

## Additional information

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